



Ghee butter : difference from butter and benefits for the body

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Abstract. The article discusses the main properties of ghee oil and its effect on the human body. A systematic review of modern specialized literature and relevant scientific data was carried out. The chemical composition and nutritional value of the product are indicated, the use of ghee oil is considered in various types of medicine and the effectiveness of its use in various diseases. Potentially adverse effects of ghee oil are analyzed separately on the human body under certain medical conditions and diseases.

Key words: ghee oil , benefits, harms, beneficial properties, contraindications

Ghee is ghee and a healthier alternative to the standard butter it is made from. The product is processed over low heat until the water evaporates, which allows it to retain more nutrients and valuable fats. It has huge health benefits and is safe for people with milk allergies. Let's take a closer look at its research-backed benefits.

The calorie content of ghee is 876 kcal per 100 g (120 kcal per 1 tablespoon). It contains a lot of omega-3 fatty acids, vitamins A and [E](#), making it one of the most valuable products of Ayurveda . Nutrients have antioxidant properties and reduce the risk of cancer, arthritis, heart disease, cataracts. It also contains more fat than butter - a lot of butyric acid and other short-chain fatty acids. ^[one]

Top 5 Benefits of Ghee for Health and Body Shape

1. Has an anti-inflammatory effect

Science has confirmed that the product contains butyrate, a butyric acid known for its anti-inflammatory properties. The substance can relieve inflammation of the internal organs and skin - in Ayurvedic medicine it is used to treat burns and swelling. ^[2, 3, 4]

2. Supports heart health

Ghee is rich not just in fats, but in omega-3 monounsaturated fatty acids. Components improve the functioning of the cardiovascular system and reduce the level of "bad" cholesterol, if they are part of a balanced diet. [5, 6]

3. Helps to lose weight

No matter how paradoxical it may sound, but a product with a high concentration of fat fights obesity. Conjugated linoleic acid (CLA) is responsible for the effect, which helps to reduce the percentage of lipids in the body, slows down weight gain. Some studies show that CLA additionally fights malignant tumors. [7, 8]

4. Does not harm people with lactose intolerance

Unlike butter, ghee does not contain lactose and casein protein, but only trace amounts of them. This makes it an excellent source of fat for people with allergies or sensitivities to dairy components (lactase deficiency).

5. Saturates the body with vitamin A

Ghee saturates the body with fat-soluble vitamin A - 4000 IU of the nutrient is concentrated in 100 g. A useful component supports the immune system, the health of the eyes, skin and performs many other functions. [9]

Harm of ghee : what is dangerous and how to protect yourself from side effects

The product can be part of a balanced diet, but due to its high fat content, it should be consumed in moderation. When abused, it harms:

- **Increases the risk of heart disease.** Saturated fats in large quantities are dangerous for the heart. And the cholesterol included in the composition is oxidized when processed at high temperatures and increases the risk of inflammation. [10, 11]
- **Leads to overweight.** If you exceed the daily intake, the weight will not decrease, but only increase.

By using the product in moderation, you can not be afraid of side effects. [12]

How much ghee is safe to eat each day?

For most people, the recommended daily serving is 2-3 teaspoons. The maximum allowable daily allowance is 6 tsp. If you want to get only benefit from the product, consume no more than 10-15 ml daily - the excess turns into unwanted fats.

How to cook ghee and what to eat it with - the best recipe, ways to use

The product has been popular in Indian and Pakistani cuisines for several millennia. After reheating, it does not require refrigeration and can be stored at room temperature for several weeks. Don't know how to make ghee ? This is easy to do at home, because only one ingredient is required - unsalted butter from cow's milk with a fat content of 82% and higher (about 700–800 g is obtained from 1 kg).

Recipe for Pure and Healthy Ghee :

- cut the product into cubes, place in a frying pan or pan with a thick bottom over low heat or in a water bath;
- let the butter melt and boil, and then remove the milk particles and foam that have floated to the surface with a slotted spoon;
- when heated and the foam is removed in a timely manner, the cloudy solution becomes transparent and intensely yellow, and a white precipitate falls to the bottom - it is divided into fats and proteins (cooking time depends on the initial volume and the process can last 2 hours);
- melt the butter, avoiding extremes - it should not boil and the fire should not be too small;
- to determine readiness, it is enough to turn on a strong fire for 10 seconds - melted butter without water and impurities will not boil, give foam;
- let the liquid cool and strain it through a cheesecloth or coffee filter to separate the protein.

Ghee has clear advantages over butter - it is stored for 3-4 months in the refrigerator or at room temperature, it is excellent for frying. Upon subsequent heating, it releases much less of the toxic acrylamide compound than its animal and vegetable counterparts. ^[13]

Ghee also has a high smoke point of 250°C. Only at this temperature does it begin to smoke, burn and actively oxidize. However, it is used not only in the process of cooking, but also added to porridge, pastries, spread on bread.

Expert comment

Tatyana Eliseeva, nutritionist, nutritionist

You're missing out on a lot if you haven't discovered the superfood yet . Humble ghee is safe for lactose intolerance, strengthens the body, bones, skin, intestines, boosts immunity and lubricates the joints. In ancient Indian medicine , Ayurveda, it is used as a medicinal component for internal and external use. It tastes good, has a nutty flavor, is proven to be effective and is definitely worth including in the diets of adults and children.

Literature

1. Ghee, clarified butter, <https://fdc.nal.usda.gov/fdc-app.html#/food-details/1103844/nutrients>
2. Potential beneficial effects of butyrate in intestinal and extraintestinal diseases, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3070119/>
3. Effects of sodium butyrate on intestinal health and gut microbiota composition during intestinal inflammation progression in broilers, <https://pubmed.ncbi.nlm.nih.gov/31162611/>
4. Butyric acid – a well-known molecule revisited, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5497138/>
5. Omega-3 fatty acids and cardiovascular disease, <https://pubmed.ncbi.nlm.nih.gov/25720716/>
6. Omega-3 fatty acids and inflammatory processes: from molecules to man, <https://pubmed.ncbi.nlm.nih.gov/28900017/>
7. Conjugated Linoleic Acid Effects on Cancer, Obesity, and Atherosclerosis: A Review of Pre-Clinical and Human Trials with Current Perspectives, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6413010/>
8. A review on the effects of conjugated linoleic fatty acid (CLA) upon body composition and energetic metabolism, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4574006/>
9. Vitamin A, <https://www.ncbi.nlm.nih.gov/books/NBK482362/>
10. Circulating Oxidized Low-Density Lipoprotein is a Strong Risk Factor for the Early Stage of Coronary Heart Disease, <https://pubmed.ncbi.nlm.nih.gov/30414358/>

11. Cholesterol oxides in Indian ghee: possible cause of unexplained high risk of atherosclerosis in Indian immigrant populations, <https://pubmed.ncbi.nlm.nih.gov/2887943/>
12. The effect of ghee (clarified butter) on serum lipid levels and microsomal lipid peroxidation, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3215354/>
13. Acrylamide formation in vegetable oils and animal fats during heat treatment, <https://pubmed.ncbi.nlm.nih.gov/27374529/>

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